

Professional and Managerial Branch
Engineering Group
Registered Engineer Series

MECHANICAL ENGINEERING ASSOCIATE II*

09/89

CHARACTERISTICS OF THE CLASS:

Under general supervision, performs a variety of engineering duties and supervises engineering, technical and clerical personnel engaged in engineering projects; performs related duties as required.

EXAMPLES OF DUTIES:

Prepares designs of mechanical systems such as heating, ventilation and air conditioning systems for City owned facilities; performs engineering services concerning maintenance, repair, modification and operation of mechanical systems in City owned facilities; reviews plans of proposed mechanical systems prepared by consultants; inspects City facilities to determine condition of mechanical systems; maintains records of maintenance and repair work performed; prepares and implements schedules of preventive maintenance and major repairs; prepares specifications and cost estimates of repairs, modifications or replacement of mechanical systems; trains personnel in the operation and maintenance of mechanical systems.

Conducts energy and utility studies and prepares recommendations for utility conservation and energy management in City facilities; advises other departments in the development and evaluation of utility budgets; develops utility conservation policies and procedures; develops data bases for utility conservation management information systems; prepares state and federal energy grants.

Interprets plans and specifications of project being completed under contract; supervises and conducts field inspections of contracted projects; reviews plans for proposed HVAC systems prepared by consulting engineers and architects; assigns and oversees the inspection and testing of workmanship and materials used in contract construction projects; reports deficiencies to contractor during warranty period; reviews and checks bid estimates.

Supervises, trains, and evaluates assigned personnel; enforces established rules and regulations, standards of conduct and work attendance; complies with and enforces safe working practices and procedures; maintains records and prepares reports; represents the City at public hearings and meetings.

MINIMUM QUALIFICATIONS:

Training and Experience: Graduation from an accredited college or university with a Bachelor's Degree in Mechanical Engineering and two years of professional mechanical engineering experience; or an equivalent combination of training and experience.

Knowledge, Abilities and Skills: Good knowledge of mechanical engineering principles and practices; good knowledge of heating ventilating, air conditioning, heat transfer and steam, water and sanitary piping systems; good knowledge of the methods, materials, tools and equipment used in mechanical systems; good knowledge of mechanical engineering design; good knowledge of energy conservation methods, techniques and procedures; good knowledge of cost determination techniques; some knowledge of supervisory methods, standards of conduct and work attendance; some knowledge of safe working practices and procedures; some knowledge of the use of computer-aided drafting and design (CADD) systems.

Ability to plan and organize a comprehensive energy management program; ability to prepare designs, plans and specifications; ability to supervise, train and evaluate assigned personnel; ability to determine project costs; ability to interpret plans and specifications and identify defects; ability to express oneself clearly and concisely, both orally and in writing; ability to establish and maintain effective working relationships with fellow employees and the general public; ability to maintain records and prepare reports.

Physical Requirements: Mobility within an office, field and construction site environment; operate a motor vehicle through City traffic.

Special Requirements: Subject to on-call during non-working hours and mandatory overtime during periods of Public Works Emergency Operations.

Licenses and Certificates: Texas Class "C" Drivers License or equivalent license issued by another state.

- * The Title of Mechanical Engineer II may be used provided registration as a Professional Engineer in the State of Texas has been obtained.

Director of Personnel

Department Head